

REMARKS

I. General Remarks

The application has been reviewed in light of the Final Office Action mailed December 6, 2005 and the Advisory Action mailed February 16, 2006. At the time of the Advisory Action, claims 1-43 were pending in this application. Claims 1, 29, 34, and 39 have been amended herein. Claims 11-28 have been cancelled herein, and claims 44-57 have been added as new claims.

Claims 1- 43 stand rejected in view of prior art. For the reasons discussed below, the Applicants believe that all of the remaining claims are patentable over the cited prior art, and therefore respectfully traverse the Examiner's rejection.

II. Amendments to the Specification

Paragraphs [0014]-[0018] have been added to the Specification. Antecedent basis for these paragraphs may be found in U.S. Patent Application No. 10/728,295. The specification of this copending application has been incorporated by reference in full into the present disclosure, and as such forms part of the present disclosure. *See* Present Application, para. [0028]. The Manual of Patent Examining Procedure explains that matter copied into an application from another application that has been incorporated by reference is not new matter as follows:

Instead of repeating some information contained in another document, an application may attempt to incorporate the content of another document or part thereof by reference to the document in the text of the specification. The information incorporated is as much a part of the application as filed as if the text was repeated in the application, and should be treated as part of the text of the application as filed. Replacing the identified material incorporated by reference with the actual text is not new matter.

M.P.E.P. § 2163.07(b). Accordingly, Applicants respectfully submit that no new matter has been added by this amendment. *See* MPEP §§ 608.01(p)(I), 2163.07(b).

III. Remarks Regarding 35 U.S.C. § 103(a) Rejections

None of the Cited References Teach or Suggest Each and Every Limitation of the Amended Claims

Claims 1-6, 8-13, 15-19, and 21-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either U.S. Patent 6,425,448 issued to Zupanick *et al.* (hereinafter "Zupanick") or in view of U.S. Patent 5,547,023 issued to McDaniel *et al.* (hereinafter

“*McDaniel*”). Claims 7 and 20 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Zupanick* in view of *McDaniel* and further in view of U.S. Patent Publication 2002/0170712 issued to Milne *et al.* [hereinafter *Milne*]. Claims 14 and 39-43 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Zupanick* in view of *McDaniel* and further in view of U.S. Patent Publication 2003/0062198 issued to Gardes *et al.* [hereinafter *Gardes*]. Claims 11-28 have been cancelled and are therefore no longer relevant to these rejections.

Applicants traverse on the basis of the amended claims. A *prima facie* case of obviousness requires a showing that all claim limitations be taught or suggested by the art. M.P.E.P. § 2143.03. Applicants respectfully submit each of the above-cited combination of references fails to form a proper basis for a *prima facie* case of obviousness, because each combination fails to teach all of the limitations of the claimed invention.

In particular, as to independent claims 1, 29, 34, and 39, the cited references do not contain any teaching of “optimizing a number, placement and size of a plurality of fractures in the subterranean formation so as to determine a maximum interference spacing between the plurality of fractures by (a) determining one or more geomechanical stresses induced by each fracture based on the dimensions and location of each fracture, (b) determining a geomechanical maximum number of fractures based on the geomechanical stresses induced by each of the fractures, and (c) determining a predicted stress field based on the geomechanical stresses induced by each fracture.”

Thus, for at least these reasons, each of the above-cited combination of references fails to teach each and every limitation of Applicants’ claims. Thus, Applicants respectfully request the removal of the 35 U.S.C. § 103(a) rejection as to the independent claims 1, 29, 34, and 39 and correspondingly, dependent claims 2-10, 30-33 and 35-43.

IV. Remarks Regarding New Dependent Claims 44-57

Although no rejection has been made to dependent claims 44-57, to advance prosecution of these claims, Applicants observe that none of the cited prior art references supply all of the limitations recited in Applicants’ claims 44-57. In particular, all of these newly added dependent claims depend, either directly or indirectly, from independent claim 1, which as Applicants have argued above in Section III, should be allowable. Thus, Applicants respectfully request that these claims be passed to issuance.

V. No Waiver

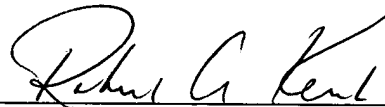
All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the cited references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the anticipation and obviousness rejections.

SUMMARY

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments, or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

The Commissioner is hereby authorized to debit the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300 in the amount of \$790.00 for the RCE fee under 37 C.F.R. § 1.114. Applicants believe that no additional fees are due in association with the filing of this Response. However, should the Commissioner deem that any additional fees are due, including any fees for extensions of time, the Commissioner is authorized to debit the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300, for any underpayment of fees that may be due in association with this filing.

Respectfully submitted,



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